Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method of simulating a system, the method comprising:

modeling the system to be simulated using computer code to produce a system model comprising at least a first portion and a second portion;

in a simulator, performing simulation in a first simulation mode having a first accuracy level for at least a first portion of code ~~that models at least a~~ comprising the first portion of the system model; and

in the same simulator, performing simulation in a second simulation mode having a second accuracy level different from the first accuracy level for at least a second portion of code ~~that models at least a~~comprising the second portion of the system model.

2. (Previously presented) The method of claim 1, wherein the first simulation mode comprises a functional simulation mode in which behavior of the system represented by the first portion of code is simulated without regard to execution time to thereby obtain information about functionality of the first portion of the simulated system;

and the second simulation mode comprises a performance simulation mode in which behavior of system represented by the second portion of code is simulated with regard to execution time to thereby obtain information about the performance of the second portion of the simulated system.

3. (Previously presented) The method of claim 1, wherein the different modes are invoked within a single simulation program execution run.

4. (canceled)

5. (Previously presented) The method of claim 2, further comprising adjusting the second accuracy level of the second performance simulation mode.

6. (Previously presented) The method of claim 5, wherein the second portion of code includes two portions of code, and the method further comprises adjusting the second accuracy level for the two portions of code independently of each other.

7-9. (canceled)

10. (Previously presented) A simulation system for simulating the performance of an external system, the simulation system comprising:

a module for performing simulation in a first simulation mode having a first accuracy level for at least a first portion of code that models at least a portion of the external system; and

a module for performing simulation in a second simulation mode having a second accuracy level different from the first accuracy level for at least a second portion of code that models at least a portion of the external system.

11. (Previously presented) The system of claim 10, wherein the first simulation mode comprises a functional simulation mode in which behavior of the external system represented by the first portion of code is simulated without regard to execution time to thereby obtain information about functionality of the first portion of the simulated external system; and the second simulation mode comprises a performance simulation mode in which behavior of the external system represented by the second portion of code is simulated with regard to execution time to thereby obtain information about the performance of the second portion of the simulated external system.

12. (currently amended) The system of claim 10, wherein the different modes are invoked within a single simulation program execution run.

13. (canceled)

14. (Previously presented) The system of claim 11, further comprising a module for facilitating adjustment of the second accuracy of the second performance simulation mode

15. (currently amended) The system of claim 11, wherein the second portion of code includes two portions of code and the system further comprises a module for facilitating the adjustment of the second accuracy of the performance simulation mode for the two portions of code independently of each other.

16. (canceled)

17. (Previously presented) The method of claim 1 wherein the step of modeling the external system to be simulated using computer code includes modeling all of the external system to be simulated;

the step of performing simulation in a first simulation mode includes performing a functional simulation on all of the external system;

the step of performing simulation in a second simulation mode includes performing a performance simulation at least a part of the external system; and

the first simulation mode and the second simulation mode are performed during a single simulation program execution run.

18. (Previously presented) The system of claim 10 wherein all of the system to be simulated is modeled using computer code;

the module for performing simulation in a first simulation mode performs a functional simulation on all of the external system;

the module for performing simulation in a second simulation mode performs simulation of at least a part of the external system; and

the modules for performing the first simulation mode and the second simulation mode are invoked during a single simulation program execution run.